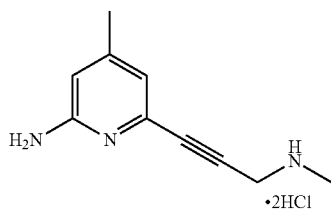
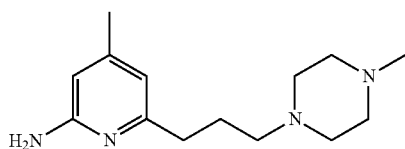


H.  $^1\text{H}$  NMR (500 MHz,  $\text{CD}_3\text{OD}$ ):  $\delta$  6.69 (s, 1H), 6.68 (s, 1H), 3.13-3.04 (m, 2H), 2.92 (s, NH, 1H), 2.86-2.82 (m, 2H), 2.73 (s, 3H), 2.38 (s, 3H), 2.14-2.07 (m, 2H).  $^{13}\text{C}$  NMR (126 MHz,  $\text{CD}_3\text{OD}$ ):  $\delta$  159.2, 156.0, 148.7, 114.8, 111.3, 49.2, 33.6, 30.4, 26.0, 22.0. LRMS (ESI) Calcd for  $\text{C}_{10}\text{H}_{18}\text{M}_3$  [(M+H) $^+$ ]: 180.15, found: 180.50.



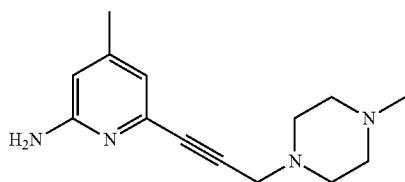
4-Methyl-6-(3-(methylamino)prop-1-yn-1-yl)pyridin-2-amine hydrochloride (71)

[0351] Compound 71 (brown solid, 172 mg, 0.890 mmol, 84%) was prepared from 81 according to General Procedure H.  $^1\text{H}$  NMR (500 MHz,  $\text{CD}_3\text{OD}$ ):  $\delta$  6.72 (s, 2H), 3.28-3.20 (m, 2H), 2.93 (s, 6H), 2.84 (t,  $J=7.8$  Hz, 2H), 2.38 (s, 1H), 2.22-2.16 (m, 2H).  $^{13}\text{C}$  NMR (126 MHz,  $\text{CD}_3\text{OD}$ ):  $\delta$  159.1, 155.9, 148.5, 114.9, 111.3, 57.7 (2 $\times$ C), 43.6, 30.3, 24.7, 22.0. LRMS (ESI) Calcd for  $\text{C}_{10}\text{H}_{14}\text{N}_3$  [(M+H) $^+$ ]: 176.12, found: 177.52.



[0352] 4-Methyl-6-(3-(4-methylpiperazin-1-yl)propyl)pyridin-2-amine (72)

[0353] Compound 72 (brown solid, 163 mg, 0.656 mmol, 80%) was prepared from 81 according to General Procedure H.  $^1\text{H}$  NMR (500 MHz,  $\text{CDCl}_3$ ):  $\delta$  6.34 (s, 1H), 6.14 (s, 1H), 4.27 (s, 2H), 2.73-2.33 (m, 11H), 2.27 (s, 3H), 2.18 (s, 4H), 1.88-1.82 (m, 2H).  $^{13}\text{C}$  NMR (126 MHz,  $\text{CDCl}_3$ ):  $\delta$  60.3, 158.2, 149.1, 114.4, 106.4, 58.3, 55.3, 53.3, 46.2, 36.0, 27.1, 21.0. LRMS (ESI) Calcd for  $\text{C}_{14}\text{H}_{25}\text{N}_4$  [(M+H) $^+$ ]: 249.21, found: 250.09.



4-Methyl-6-(3-(4-methylpiperazin-1-yl)prop-1-yn-1-yl)pyridin-2-amine (73)

[0354] Compound 73 (off-white solid, 240 mg, 0.982 mmol, 92%) was prepared from 81 according to General

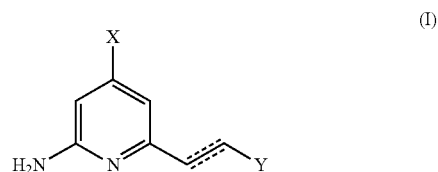
Procedure H.  $^1\text{H}$  NMR (500 MHz,  $\text{CDCl}_3$ ):  $\delta$  6.62 (s, 1H), 6.22 (d,  $J=1.5$  Hz, 1H), 3.50 (s, 2H), 2.82-2.32 (m, 8H), 2.27 (s, 3H), 2.15 (s, 3H).  $^{13}\text{C}$  NMR (126 MHz,  $\text{CDCl}_3$ ):  $\delta$  158.4, 148.9, 140.6, 119.1, 108.8, 85.4, 83.1, 55.1, 52.0, 47.6, 46.1, 20.8. LRMS (ESI) Calcd for  $\text{C}_{14}\text{H}_{21}\text{N}_4$  [(M+H) $^+$ ]: 45.18, found: 246.10.

[0355] In the foregoing description, it will be readily apparent to one skilled in the art that varying substitutions and modifications may be made to the invention disclosed herein without departing from the scope and spirit of the invention. The invention illustratively described herein suitably may be practiced in the absence of any element or elements, limitation or limitations which is not specifically disclosed herein. The terms and expressions which have been employed are used as terms of description and not of limitation, and there is no intention that in the use of such terms and expressions of excluding any equivalents of the features shown and described or portions thereof, but it is recognized that various modifications are possible within the scope of the invention. Thus, it should be understood that although the present invention has been illustrated by specific embodiments and optional features, modification and/or variation of the concepts herein disclosed may be resorted to by those skilled in the art, and that such modifications and variations are considered to be within the scope of this invention.

[0356] Citations to a number of patent and non-patent references are made herein. The cited references are incorporated by reference herein in their entireties. In the event that there is an inconsistency between a definition of a term in the specification as compared to a definition of the term in a cited reference, the term should be interpreted based on the definition in the specification.

We claim:

1. A compound of a Formula (I) or a salt or solvate thereof:



where X is hydrogen,  $\text{C}_1$ - $\text{C}_6$ -alkyl,  $\text{C}_1$ - $\text{C}_6$ -alkoxy, halogen, or haloalkyl,

$\equiv$  represents a single, double, or triple bond;

Y is substituted aryl or substituted heteroaryl, wherein Y is substituted at one or more ring positions with halogen or a substituent having a formula  $-\text{Z}-\text{R}^a$ ; or Y has a formula  $-\text{Z}-\text{R}^a$ ;

Z is selected from  $\text{C}_1$ - $\text{C}_6$ -alkyl,  $\text{C}_2$ - $\text{C}_6$ -alkenyl, and  $\text{C}_2$ - $\text{C}_6$ -alkynyl;

$\text{R}^a$  is selected from amino, alkylamino, dialkylamino, or a 4-6 membered heterocycle which contains at least one nitrogen atom and which heterocycle is optionally substituted at one or more positions with alkyl, alkoxy, or halogen.

2. The compound of claim 1, wherein  $\text{R}^a$  is selected from pyrrolidinyl which optionally is substituted at one or more positions with alkyl or alkoxy or halogen, azetynyl which optionally is substituted at one or more positions with alkyl,